

November 16, 2010

To: Members, Delta Independent Science Board

From: Richard B. Norgaard, Chair

Re: Prioritizing Stressors

In August various members of the California Senate and Assembly requested the Delta Stewardship Council (DSC) to ask the Delta Independent Science Board to assess the stressors to native fish populations. DSC Chair Isenberg relayed this request to us on September 30 at the first meeting of the DISB, expanding the request to the prioritizing of stressors to the Delta ecosystem. During the second day of our first meeting, we pondered this request and the difficulties we would have in meeting it. At that time, we thought we could respond to the request from the DSC through our overviews of the “white papers” being prepared for the DSC. It turned out, however, that the white papers are too general to provide sufficient scientific context for prioritizing stressors.

Cliff Dahm, Mike Healey, Lauren Hastings, Gina Ford, Marina Brand, and I held conference calls during which we fleshed out the key concerns the request from the DSC raised and came up with a strategy.

The key concerns are:

1. The primary task of the Delta Independent Science Board is to oversee the quality of the science available to the DSC¹, the State of California, and the public at large.
 - a. The DISB should not be engaging in the production of new research, including new integrations, or syntheses, of existing knowledge, because this would put the DISB in an awkward position with respect to independently overseeing the quality of research available to the DSC.
 - b. The conference call participants did acknowledge that the DISB should help interpret the implications of the available science with respect to policy options when requested to do so, and that providing scientific advice on policy implications may entail some synthesis.
2. While there is an abundance of material related to stressors, the Delta science community has not integrated this knowledge into an assessment of stressors.
 - a. If there were such an integrated assessment, the DISB could review its quality and interpret its implications for different policy options for the DSC.
 - b. The DISB can work with the DSP to see that such an integrated assessment takes place.

¹ 85280. (a) (3) The Delta Independent Science Board shall provide oversight of the scientific research, monitoring, and assessment programs that support adaptive management of the Delta through periodic reviews of each of those programs that shall be scheduled to ensure that all Delta scientific research, monitoring, and assessment programs are reviewed at least once every four years.

3. The scientists who have conducted the existing research related to stressors have deeper knowledge of the Delta than most members of the DISB, and this knowledge needs to be brought into the assessment, ranking of stressors, and advice provided to the DSC.

During the conference calls we devised the following strategy. In order to produce a report on stressors for the DISB to review, we decided the DSP should organize a workshop on stressors in which key researchers present and discuss the available science and synthesize it into a report on stressors. The DISB would then independently review the quality of this report and advise the DSC on its policy implications. Here is a more detailed plan:

Workshop Planning – December

1. Identify a team of DSP staff, IEP scientists, other agency, NGO, consulting firm, and academic scientists for a “brainstorming session”. One or two DISB members with particular expertise on stressors may work with this team in restricted roles. The DSP may need to hire a consultant to help DSP with this project who would also have to be identified early.
2. DSP staff and/or a consultant hired to work on the stressors prioritizing effort will identify existing lists/groupings of stressors, consider what will be most helpful for DSC, and make other preparations, including identifying key literature, for the brainstorming session.
3. The brainstorming session in December will:
 - a. Determine list of stressors to be prioritized;
 - b. Determine general approach to prioritization;
 - c. Discuss how to work with expertise of specialists and broad knowledge of generalists;
 - d. Determine how the collective judgment of the workshop can best be conveyed to the DSC;
 - e. Determine who will facilitate workshop and how results will be written up, etc.
 - f. Determine how the key invited participants can contribute to and assure the overall quality of the final report.

Workshop – late January or early February

1. Will be a public meeting so that the public can provide comments and a significant number of DISB members can attend,
2. Have a general discussion and reach a collective judgment of “stressor rankings”.

Report Preparation – late February and March

1. The draft report will be prepared by February 21 and sent for review and comment to the key invited participants to provide input. Comments must be received by March 7;
2. A final report will be prepared by March 16 and made available for DISB review and assessment of its quality;
3. The DISB will transmit its assessment and advice with respect to the implications of the findings for different policy options to the DSC by March 22, giving DSC Chair

Isenberg the opportunity to transmit the DISB's advice to the requesting members of the Senate and Assembly; and

4. The report as well as the assessment and advice of the DISB will be posted on the DSP website shortly thereafter.

This approach has the advantage of allowing the Delta Independent Science Board to maintain its independence and primary role of providing oversight on the quality of Delta science and to independently provide advice. It allows Delta scientists to combine their expertise and to direct their research in the future toward critical questions as seen from a more systemic perspective.

cc: Phil Isenberg